

## X-Boom, Phase I

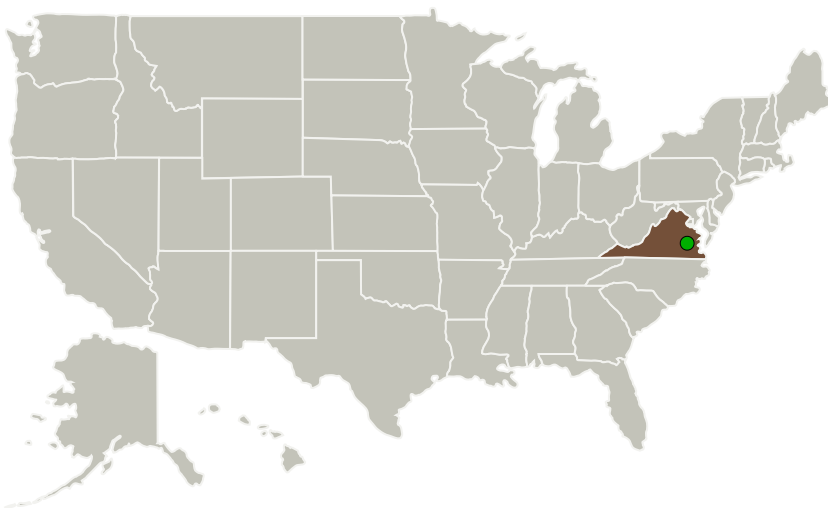
Completed Technology Project (2015 - 2015)



## Project Introduction

The proposed X-Boom is an innovation on rollable boom design directly relevant to NASA SBIR topic H5.01, Deployable Structures. The X-boom is a rollable Carbon Fiber Reinforced Polymer (CFRP) boom with an open and symmetrical cross-section. X-boom exhibits superior strength when compared to other open section state of the art (SOA) rollable booms and reduced system integration complexity when compared to both open and closed section SOA rollable booms.

## Primary U.S. Work Locations and Key Partners



X-Boom, Phase I

## Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	2
Images	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	2
Technology Areas	3
Target Destinations	3

Organizations Performing Work	Role	Type	Location
Analytical Mechanics Associates, Inc.	Lead Organization	Industry	Hampton, Virginia
● Langley Research Center(LaRC)	Supporting Organization	NASA Center	Hampton, Virginia

## Primary U.S. Work Locations

Virginia

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## Project Transitions

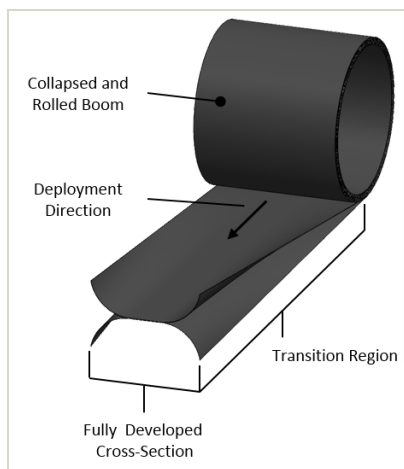
**June 2015:** Project Start

**December 2015:** Closed out

### Closeout Documentation:

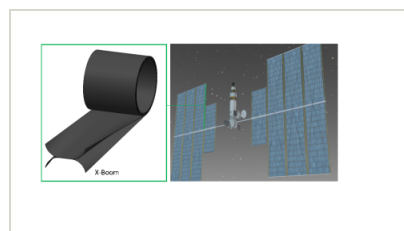
- Final Summary Chart(<https://techport.nasa.gov/file/139560>)

## Images



### Briefing Chart

X-Boom Briefing Chart  
(<https://techport.nasa.gov/image/136598>)



**Final Summary Chart Image**  
X-Boom, Phase I Project Image  
(<https://techport.nasa.gov/image/133970>)

## Organizational Responsibility

### Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

### Lead Organization:

Analytical Mechanics Associates, Inc.

### Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

## Project Management

### Program Director:

Jason L Kessler

### Program Manager:

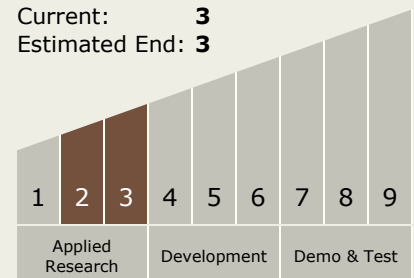
Carlos Torrez

### Principal Investigator:

John Abrams

## Technology Maturity (TRL)

Start: **2**  
Current: **3**  
Estimated End: **3**



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### Technology Areas

#### Primary:

- TX12 Materials, Structures, Mechanical Systems, and Manufacturing
  - └ TX12.2 Structures
    - └ TX12.2.1 Lightweight Concepts

### Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System